

Attachment 2

SECTION 205(j)(1)/604(b) WORK PROGRAM FOR CALENDAR YEARS 2013-14

Subobjective 2.2.1: Improve Water Quality on a Watershed Basis - Use pollution prevention and restoration approaches to protect and restore the quality of rivers, lakes, and streams on a watershed basis.

Cooling Water Intake Rules & Performance Standards Evaluations

LIST OF PENNSYLVANIA EXISTING §316(b) FACILITIES With Existing Section 316(b) Cooling Water Intake Structures

Facility	Company	Intake Waterbody (Basin)	DEP Region	NPDES Permit No.	Information Collection / Studies
SERO - Norristown					
Cromby Generating Station.	Exelon	Schuylkill River	SERO	PA0011631	Retired in 2011
Eddystone Generating Station	Exelon	Delaware River	SERO	PA0013714	Submitted study
Fairless Hills Gen Station*	Exelon	Delaware River	SERO	PA0013463	Submitted study
Limerick Generating Station	Exelon	Schuylkill River	SERO	PA0019616	BTA**
Schuylkill Gen Station	Exelon	Schuylkill River	SERO	PA0011657	Retiring in 2013
SCRO - Harrisburg					
Brunner Island Gen Station	PPL	Susquehanna River	SCRO	PA0008281	Submitted study
Peach Bottom Atomic Power	Exelon	Susquehanna River	SCRO	PA0009733	Submitted study
Three Mile Island Nuclear Station	Exelon	Susquehanna River	SCRO	PA0009920	BTA**
SWRO - Pittsburgh					
Beaver Valley Power Station*	AES (w/ NOVA	Ohio River	SWRO	PA0025615	Submitted study
Armstrong Power Station	First Energy	Allegheny River	SWRO	PA0002917	Retired in 2012
Cheswick Power Station	GenOn	Allegheny River	SWRO	PA0001627	Permit under appeal
Elrama Generating Station	GenOn	Monongahela River	SWRO	PA0001571	Retired in 2012
Mitchell Station	First Energy	Monongahela River	SWRO	PA0002895	Retiring in 2013
NERO - Wilkes-Barre					
Hunlock Creek Elec Station	UGI	N Br Susqu River	NERO	PA0008664	Submitted study
Martins Creek	PPL	Delaware River & Oughoughton Cr	NERO	PA0012823	BTA**
Portland Generating Station	GenOn	Delaware River	NERO	PA0012475	Retired in 2012
Susquehanna Steam Elec Station	PPL	Susquehanna River	NERO	PA0047325	BTA**
NCRO - Williamsport					
Montour Station	PPL	W. Br. Susq River	NCRO	PA0008443	BTA**
Shawville Generating Station	GenOn	W. Br. Susq River	NCRO	PA0010031	Retiring in 2015
Sunbury Steam Elec Station	Sunbury Generation	Susquehanna River	NCRO	PA0008451	Started
NWRO - Meadville					
Newcastle Gen. Station	GenOn	Beaver River (Ohio River)	NWRO	PA0005061	Retiring in 2015

Attachment 1

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Pennsylvania's Water Quality Standards Program – Stream Redesignation Evaluation

Proposed Water Body Surveys

2014 Stream Redesignation Evaluations

Stream	County	Survey Purpose
Bushkill	Pike	Stream Petition
Pond Eddy	Pike	Stream Petition
UNT Shohola Creek	Pike	Stream Petition
EB Dyberry Creek	Wayne	Stream Petition
WB Dyberry Creek	Wayne	Stream Petition
Cranberry Creek	Monroe	Stream Petition
Goose Pond Run	Monroe	Stream Petition
Leavitt Branch	Monroe	Stream Petition
Middle Branch	Monroe	Stream Petition
Spruce Mountain Run	Monroe	Stream Petition
Griscom Creek	Monroe	Stream Petition
Michael Creek	Monroe	Stream Petition

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	EPA Contact (s): Denise Hakowski	State Contact (s): Tony Shaw
		PRC: 202B06

Is Program – Toxicity testing for impacts of chloride and sulfate on sensitive species, and representative of the ionic matrices of Pennsylvania waters.

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
<p>): Number, and national of States and Territories orized Tribes that within eding three year period, d new or revised water riteria acceptable to l reflect new scientific ion from EPA or other s not considered in the standards.</p>	<p>WATER QUALITY STANDARDS PROGRAM:</p> <p>OUTPUT:</p> <ul style="list-style-type: none"> PA DEP DWQS would like to contract with researcher(s) to conduct specific toxicity testing studies with sensitive species to characterize chloride and sulfate toxicity, representative of Pennsylvania waters and ion matrices. These toxicity studies would target appropriate sensitive mayfly and other representative species of Pennsylvania freshwater aquatic systems, under various representative pollutant and ionic matrices or dilution series. <p>ACTIVITIES:</p> <ul style="list-style-type: none"> Since DEP does not have the expertise to do this requisite toxicity testing, this work will be contracted to experts in toxicity testing. 	

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 Reporting Period: _____ to _____.

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gram – Monitoring in response to diseased YOY (Young of Year) and intersex smallmouth bass

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
Number, and national f States and Territories rized Tribes that within ling three year period, new or revised water teria acceptable to reflect new scientific on from EPA or other not considered in the standards.	WATER QUALITY STANDARDS PROGRAM: OUTPUT: <ul style="list-style-type: none"> Results of the efforts will be a comprehensive assessment of the Susquehanna River and tributaries to determine and identify if any water quality conditions contribute to the smallmouth bass problem. Results will be reported in the 2014 Integrated Report. ACTIVITIES: <ul style="list-style-type: none"> Continue studies which began in 2012 (primary focus on the Susquehanna River basin). The work includes deploying sondes at multiple locations throughout the summer to continuously measure dissolved oxygen, pH, temperature and conductivity. Conduct cross-transects at multiple locations to determine the distribution of dissolved oxygen and the mixing characteristics near the mouths of smaller tributaries. These studies will help determine if these factors contribute to stress that results in the YOY smallmouth bass disease. Additional chemical testing will be conducted to attempt to determine the contributing factors to the intersex condition. Instantaneous chemical samples will be collected and passive samplers will be deployed. The passive samplers concentrate the chemicals present in the water column to determine if pesticides, herbicides, or endocrine disrupters are contributing to intersex condition observed in adult bass 	

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rogram – Macroinvertebrate Sample Processing and Taxonomic Identification for Special Biological Monitoring Projects

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
<p>i): Number, and national of States and Territories orized Tribes that within eding three year period, d new or revised water criteria acceptable to l reflect new scientific ion from EPA or other s not considered in the standards.</p>	<p>WATER QUALITY STANDARDS PROGRAM:</p> <p>OUTPUT:</p> <ul style="list-style-type: none"> Macroinvertebrate taxa lists will be generated for the use in evaluating the potential of a macroinvertebrate Index of Biotic Integrity (IBI) for Pennsylvania’s large rivers, other biological metric protocol revisions, water quality standards for aquatic life use evaluations, and impairment assessments. <p>ACTIVITIES:</p> <ul style="list-style-type: none"> DEP collects large river macroinvertebrate samples in an ongoing effort to develop a large river sampling protocol. Because Chironomidae are ecologically important organisms in these large river systems, they may need to be contracted out for identification to Genus since DEP lacks that specific expertise at this time. Additional biological monitoring projects are anticipated and may require similar contract support to process the collected biological samples. 	

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gram –Increase Monitoring in Areas of Gas Drilling and Related Wastewater Treatment

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
<p>Number, and national f States and Territories rized Tribes that within ling three year period, new or revised water teria acceptable to reflect new scientific n from EPA or other not considered in the standards.</p>	<p>WATER QUALITY STANDARDS PROGRAM:</p> <p>OUTPUT:</p> <ul style="list-style-type: none"> • The collected water quality monitor data will form a dynamic database for use by managers to identify and document problems as they are uncovered. • Stream assessment samples will be analyzed and used by staff biologists for cause/effect assessments. • Radiological samples indicating a problem will be referred to the Bureau of Radiation management for follow-up. <p>ACTIVITIES:</p> <ul style="list-style-type: none"> • Increase the number of stream assessments in areas of high density gas drilling activities and related wastewater treatment facilities in order to both establish pre-drilling conditions and monitor for changes as drilling proceeds. • Chemistry samples will be taken upstream (control) and downstream of treatment facility discharges, in areas of high density drilling activities, where drilling occurs in sensitive areas, and in response to any flow back water spills. The samples may include major radiological parameters and metals found in fracking flow back water. Both water column and sediment samples will be collected. • Staff will deploy continuous water quality monitors to gather primarily specific conductance for the same purposes and the continuous data will be maintained in and analyzed with AQUARIUS software. Must maintain appropriate software license(s). 	<ul style="list-style-type: none"> •

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rogram – PWS Use Determinations

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
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	EPA Contact (s): Francisco Cruz	State Contact (s): Tom Barron	PRC: 202B80
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Performance Rules & Performance Standards Evaluations

Measures	Outputs for CY 2014 (Commitments)	Status/Comment
<p>Percent of non-tribal facilities covered by NPDES permits that are considered</p> <p>Number, and national average of high priority state permits that are issued</p>	<p>OUTPUT:</p> <ul style="list-style-type: none"> Reviews of information submitted by existing facilities, demonstrations, and other forms of documentation implemented under Section 316(b) of the Clean Water Act to reduce aquatic life impacts from cooling water intake structures <p>ACTIVITIES:</p> <ul style="list-style-type: none"> Since the Section 316(b) of the Clean Water Act Phase II rule was suspended by the EPA in May 2007 in response to the <i>Riverkeeper II</i> decision, state agencies are proceeding with implementation of 316(b) on a case-by-case basis using Best Professional Judgment (BPJ). There were 21 facilities categorized as existing Phase II facilities within Pennsylvania (see table below) that began collecting information about their intake structure after the Phase II rule was promulgated in 2004. Despite the suspension of the rule, these facilities are required to demonstrate that they have the Best Technology Available (BTA) for minimizing impingement mortality and entrainment of fishes and other aquatic life or propose technologies to reduce impingement and entrainment. The facilities were required to submit an impingement mortality and entrainment characterization study and technology evaluations to determine the BTA. These facilities were requested to submit this information between July 2008 and January 2009. Review is on-going and is prioritized on the basis of permit renewal dates. Based on recent press releases, and other notifications, several of these facilities are scheduled to retire units between 2012 and 2015. This review, however, is no longer limited just to the original Phase II facilities. Section 316(b) reviews are on-going and prioritized on the basis of permit renewal date or relative impact, and other relevant factors. 	

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Program – Stream Redesignation Evaluation

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